

Claim 3 as indefinite under 35 USC §112 due to the word "substantial" in line 3 of Claim 3 and has stated that the specification does not provide a standard for ascertaining the requisite degree that would be "substantial." The Examiner has also rejected Claims 1-10 under 35 U.S.C. §103(a) as being unpatentable over Giuseppe et al. (U.S. Pat. No. 5,497,594) in view of Finley (U.S. Pat. No. 6,054,207). Finally, the Examiner has indicated that claim 11 would be allowed if re-written in independent form so as to include all of the limitations of claims 10, 9 and 1 from which it depends.

As to the restriction requirement into Group I consisting of Claims 1-11 drawn to a multi-component extrusion, Group II consisting of Claims 12-14 drawn to a multi-plate extrusion die, and Group III consisting of Claims 15-19 drawn to a method of making a multi-component extrusion, the requirement is traversed. The Applicant asserts that the restriction of the claims into Group I, II, and III is improper and respectfully requests that the restriction requirement be withdrawn. The Examiner asserts that restriction is appropriate because the extrusion of Group I can be made by a different process (such as cast molding) than the extrusion process of Group III, or by a different apparatus than the extrusion die of Group II. The Applicant knows of no means that would allow the production of the claimed product of Group I other than the extrusion die of Group II and the extrusion method of Group III. The Declaration of George Melkonian is attached hereto and forms a part of this Amendment and Response.

The Applicant has disclosed and Group I claims a product where a hollow thermoplastic composite member along with a foamed thermoplastic member are coextruded in an extrusion die where the two members are molten within the die and thereby molecularly bond the foamed member to at least one of the sidewalls of the

composite member. Independent claim 1 recites a hollow composite member and a foamed member and the foamed material may be inside or outside the hollow composite member. If the foamed member is on the inside, the Applicant knows of no casting process (as suggested by the Examiner) that would allow a foamed member within a composite member where the two are molten together and the foamed member is thereby molecularly bonded to at least one wall of the composite member. If the foamed member is on the outside, the Applicant knows of no casting process (as suggested by the Examiner) that would allow a hollow composite member to be formed together with a foamed member where the two are molten together and the foamed member is thereby molecularly bonded to at least one wall of the composite member. The above statements are supported by the attached Declaration. In light of these facts, Applicant assert that the restriction requirement as to Group II is improper and respectfully requests that such requirement be withdrawn. It should be apparent that for the above same reasons, the restriction as to the Group III claims should also be rescinded.

Applicant has amended Claim 3 to remove the word "substantial" and respectfully requests that Examiner's rejection be withdrawn.

Claim 1 is directed to a multi-component extrusion having a first, hollow, high-density cellulosic fiber/thermoplastic member and a second, low-density, foamed thermoplastic member which is coextruded with the first member in a molten state so that the first and second members are molecularly bonded and coextensive. With respect to the Section 103 rejection, the Examiner asserts that the '594 patent to Giuseppe discloses inner and outer sidewalls and an enclosed interior member but fails to disclose the foamed inner member. The Examiner further asserts that the '207 patent to Finley supplies the missing

inner foamed member teaching and that it would be obvious to one having ordinary skill in the art to fill the hollow interior portion of Giuseppe with the foamed member of Finley. The Examiner is of the opinion that Giuseppe modified by Finley is identical to or only slightly different from Applicant's claimed multi-component extrusion.

Applicant notes that there is no suggestion in either Giuseppe or Finley to combine the non-foamed composite of Giuseppe or the foamed composite of Finley with another material. Nevertheless, a person of ordinary skill in the art at the time of Applicant's invention combining Giuseppe and Finley would not practice Applicant's invention as recited in independent claim 1. As contemplated by the Examiner, a first prior art process would extrude and solidify the hollow composite profile of Giuseppe and in a subsequent step fill the Giuseppe profile with the foamed composite of Finley. Alternately, another hypothetical prior art process would extrude and solidify Giuseppe and separately extrude and solidify Finley. The Finley profile would then be inserted into the hollow, Giuseppe profile. However, neither of these hypothetical prior art processes combining the teachings of Giuseppe and Finley would yield Applicant's disclosed invention. Claim 1 recites a second, low-density foamed member and a first, high-density thermoplastic and cellulose fiber composite member where the two members are coextruded together in a molten state through an extrusion die so that the foamed material is laterally coextensive with and molecularly bonded to a sidewall of the composite material. The resulting extrusion is more economical, stronger and more weather resistant than the result of the hypothetical prior art combination which are not molecularly bonded.

Further to the first proposed prior art process of filling a solidified member with a foamed material, Applicant's invention is not limited to a multi-component extrusion with a

*Giuseppe*

composite hollow outer shell with foamed material inside. Applicant has disclosed extruded profiles where the outer portion of the multi-component extrusion is foamed. Applicant asserts that the proposed prior art process would not yield an extrusion with foamed material on the outside. Additionally, the first prior art process mates one solidified material with a molten material. Applicant discloses and claims a multi-component extrusion where the two materials are molten together in an extrusion die allowing a molecular bond between the foamed material and a sidewall of the composite material.

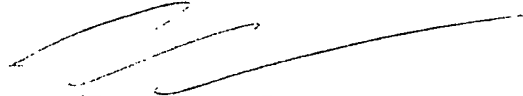
The second proposed prior art process would insert one solidified material into a hollow space within another solidified material. Applicant discloses and claims a multi-component extrusion where the two materials are molten together in an extrusion die allowing a molecular bond between the foamed material and a sidewall of the composite material. The proposed combination is simply not equivalent to the claimed invention for the reasons stated above. Furthermore, there is simply no suggestion in the cited references themselves to make the claimed combination. It is the references themselves which must suggest the desirability of the combinations. *Fromson v. Advance Offset Plate*, 755 F.2d 1549, 1556 (Fed. Cir. 1985). Thus, for this reason alone the Section 103 rejection must be rescinded.

The Examiner has cited case law related to "product by process" claims with regard to the Section 103 rejection of Claims 1-10. These cases are inapposite because Claims 1-10 are not "product by process" claims, but are simple product claims.

In view of the above, the reexamination and reconsideration of the application as amended is earnestly solicited. The Examiner is invited to contact the Applicant's representative by telephone at (206) 682-1600 to resolve any remaining issues.

Respectfully submitted,

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Enclosures:   Marked up copies of amended claims  
                  Declaration of George Melkonian  
                  Request for Extension of Time  
                  Check No. 7473 for \$110.00  
                  Postcard

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MARKED UP COPIES OF AMENDED CLAIMS

3. (Amended) The multi-component, longitudinally continuous extrusion of Claim 1, wherein the foamed thermoplastic component of the second member has a [substantial] cellulosic fiber content.

11. (Amended) A [The] multi-component, longitudinally continuous extrusion [of Claim 10,] suitable for use in the fenestration, decking and remodeling industries,  
comprising:

a first, high density composite member consisting of a thermoplastic component and a cellulosic fiber component extruded from a primary extruder into an extrusion die, wherein the first member has inner and outer sidewalls defining a high density, thin wall extrusion having at least one enclosed, hollow interior compartment;

a second, low density foamed member consisting of a foamed thermoplastic polymer, coextruded with the first member in a molten state from a secondary extruder into the extrusion die so as to be laterally coextensive with and molecularly bonded to one of the sidewalls of the first member; and,

a third member consisting of a thermoplastic cap laterally adjacent to and coextensive with a laterally outermost one of the first and second members of the multi-component extrusion, wherein,

the thermoplastic cap is coextruded for a tertiary extruder into the extrusion die substantially simultaneously with the first and second members so as to be molecularly bonded with the laterally outermost member; and,

the extrusion defines left hand and right hand sides and wherein the cap has

a highly weatherable thermoplastic polymer [has] with polyvinyl chloride as a principle component by weight on the left hand side, and [wherein the] has a highly paintable thermoplastic polymer [has] with acrylic styrene acrylonitrile (ASA) as a principle component by weight on the right side.